



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A61F 2/44	A3	(11) International Publication Number: WO 00/24327 (43) International Publication Date: 4 May 2000 (04.05.00)
(21) International Application Number: PCT/US99/25147 (22) International Filing Date: 27 October 1999 (27.10.99) (30) Priority Data: 09/181,353 28 October 1998 (28.10.98) US (71) Applicant (for all designated States except US): SDGI HOLDINGS, INC. [US/US]; Suite 508, 300 Delaware Avenue, Wilmington, DE 19801 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): BRANCH, Charles, L. [US/US]; 177 Plantation Lane, Advance, NC 27006 (US). LIU, Mingyan [CN/FR]; 41, rue de la Fontaine Grelot, F-92340 Bourg la Reine (FR). BOYD, Lawrence, M. [US/US]; 688 S. McLean Boulevard, Memphis, TN 38104 (US). JOSSE, Loic [FR/FR]; 13, La Plana, F-11570 Palaja (FR). (74) Agents: LOWES, J., Andrew et al.; Woodard, Emhardt, Naughton, Moriarty & McNett, Suite 3700, Bank One Center/Tower, 111 Monument Circle, Indianapolis, IN 46204 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 9 November 2000 (09.11.00)
(54) Title: INTERBODY FUSION GRAFTS AND INSTRUMENTATION		
(57) Abstract		
<p>This invention relates to implants (10) formed from donor bone for use in lumbar interbody fusion procedures and instruments for performing such procedures. The implants are formed to include a concave surface (14) formed from a portion of the medullary canal of a long bone. The concaved surface defines a recess (15) in the implant that serves as a depot for osteogenic material. Specific instruments for inserting the implants prepared according to this invention and for preparing the intervertebral space to receive the implants are also provided.</p>		
<div style="border: 2px solid black; padding: 10px; text-align: center;"> EXHIBIT B </div>		

986 U.S. PTO
 09/870023
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INTERNATIONAL SEARCH REPORT

International Search No.
PCT/US 99/25147

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-4

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

PCI/US 99/25147

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61F2/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	WO 98 17330 A (SDGI HOLDINGS INC ;MCKAY WILLIAM F (US)) 30 April 1998 (1998-04-30) page 4, line 33 - line 34 abstract; figure 3 ---	1
A	WO 96 22747 A (ANTONIETTI PIERRE ;GAGNA GILLES (FR); STRYKER CORP (US)) 1 August 1996 (1996-08-01) claims 1,2,4 ---	1
A	US 5 458 642 A (BEER JACQUELINE M ET AL) 17 October 1995 (1995-10-17) figure 2 ---	1
A	EP 0 392 076 A (ACROMED CORP) 17 October 1990 (1990-10-17) figure 2 -----	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

2 March 2000

Date of mailing of the international search report

25 JULY 2000

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-4
2. Claims: 5-31
3. Claims: 32-33
4. Claims: 34-45
5. Claims: 46-49, 56-57
6. Claims: 50-54
7. Claims: 58-59
8. Claims: 60-61
9. Claim : 62

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